REMARKS

All of the pending claims (1-16) were rejected in the Office Action that was mailed January 30, 2004. Claims 1 and 10 were also objected to because of informalities.

With regard to the objections, claims 1 and 10 have been amended as set forth above to correct typographical errors in the originally filed application, i.e., to provide strict antecedent basis for terms that were inadvertently mislabeled.

Dependent claims 2-4, 7-9, 11, 12 and 14-16 were not objected to, nor were they rejected, but these claims were nevertheless amended to provide strict antecedent basis to limitations used in those claims.

The specification was amended in the paragraph that begins on line 10 or page 7 to correct a typographical error. In particular, the symbol "P_{27}" on line 12 does not appear in the figure and should have been typed in the specification as "P_{57}."

Claim rejections under §112, ¶2

With regard to the claim rejections, claim 5 was rejected under 35 U.S.C. §112, ¶2 because of a contradiction between terms used in claim 5 and terms used in claim 1 from which claim 5 depends. The contradiction between claims 1 and 5 was due to a typographical error. The offending language of claim 5 should have been a copy of language used in claim 1.

As set forth above, the preamble of claim 5 has been amended to correct the typographical error. In particular, claim 5 was amended to delete the contradictory language but to also improve the claim's readability by shortening its length. No new matter has been added.

Claim 13 was rejected under 35 U.S.C. §112, ¶2 for essentially the same reason that claim 5 was rejected under 35 U.S.C. §112, ¶2. Claim 13 has also been amended to correct a typographical error, specifically to delete the contradictory language and improve the readability of the claim by shortening it. No new matter has been added.

Claim rejections under §102(e)

Claims 1, 2, 4, 5, 7-11, 13-16 were rejected under §102(e) as being anticipated by U.S. Pat. appl. serial no. 09/318694 to CAO, et al., hereafter referred to as Cao.

The applicant specifically reserves the right to swear behind Cao but has amended claims 1 and 10 as set forth above and have thereby traversed the rejections. Inasmuch as claims 1 and 10 are in condition for allowance, claims that depend on these two independent claims and which further narrow their scope also claim patentable subject matter and should be allowed.

Paraphrased, claim 1 has been amended in the preamble to recite that the claimed method is directed to establishing a data flow over a protection path. The claimed steps have also been amended to recite that the first message establishes a working path *and* a protection path between two switches of the network. The claim was amended to recite that a second message is sent in an opposite direction between the two switches and that the second message establishes a reverse notification path. Thereafter, a third message is sent over the reverse notification path by which a protection switchover is controlled by the first switch, i.e., the source switch.

Paraphrased, claim 10 has been amended in the preamble to recite that the claimed method is directed to routing data. The claim was also been amended to recite that the first message establishes a working path *and* a protection path between two switches of the network. Like claim 1, claim 10 was also amended to recite that a second message is sent in an opposite direction between the two switches and that the second message establishes a reverse notification path. Claim 10 differs from claim 1 by reciting that the interruption of the third message controls protection switching by the first switch, i.e., the source switch.

The specification states that a "liveness" message is sent *upstream* from a destination node to a source node. A liveness message loss at an upstream switch triggers a protection switchover by an upstream switch. In one embodiment, liveness messages are sent upstream periodically; in a second embodiment, a liveness message is sent upstream after a downstream message or aperiodically. In either case, if a liveness message is not received upstream on the reverse notification path, (i.e., if the liveness message is "interrupted") a determination is made by an upstream switch to perform a protection switchover.

Cao does not teach a protection switchover by an ingress or source switch

The applicant submits that the claim rejections under §102(e) should be withdrawn after this amendment is entered. Cao teaches a methodology by which a protection switchover is performed by a sink or destination switch/router. Cao does *not* show or suggest a protection

switchover being performed by an upstream switch in response to, or being controlled by, an upstream message as now claimed in independent claims 1 and 10.

Even a cursory review of Cao reveals that it is replete with descriptions of how a "sink" or "egress" switch/router effectuates a protection switchover and there is no suggestion or teaching that the "source" or "ingress" switch/router can perform a protection switchover. Pertinent excerpts of Cao are set forth below.

Paragraph [0005] of Cao reads in part:

> source and sink routers. The sink router selects one of these explicitly routed paths as a primary path and communicates along that path. Upon a failure in a path selected as a primary path, a secondary path is instantaneously selected as the new primary path. Since the new route has already been estab-

Paragraph [0006} reads in part:

> plurality of paths. In the event of a path failure, the sink router selects an operational one of the pre-established paths.

Paragraph [0011] reads in part:

> explicitly routed circuit paths. The sink router chooses one of these paths as the primary path and communicates along this primary path unless the primary path fails. If the primary path fails, the sink router switches to communications over the secondary path. In those systems where physical or link
>
> flow information. When the source and sink routers are alerted to the path failure, the sink router switches to the secondary path for communications. The source router may then establish another explicitly routed communications path to act as a new secondary path.

Paragraph 24 reads in part:

Once both paths are established, datagrams are transmitted along both paths, with the egress router choosing the one of the paths as its primary source of datagrams. Should the primary path fail, due, for example to a cut fiber along the S-A-B-E path, router E switches to a secondary route, the S-C-D-E route in this example. In accordance with the

Rejections under §103

As for the claims rejected under §103(a), the amendments to the claim preclude combining Cao to invalidate the claims. Cao teaches a protection switchover being performed by a sink or egress router. The claimed methods perform a protection switchover by the upstream or ingress router. The rejections under §103(a) should be withdrawn.

Conclusion

For the reasons set forth above, the applicant respectfully requests the claim rejections be withdrawn and that the amended claims be allowed to issue forthwith.

Respectfully submitted,

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